

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/827,519	04/06/2001	Kevin P. Nasman	3197-000009	6140
27572	7590 - 09/16/2004		EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			PHAM, THOMAS K	
P.O. BOX 82 BLOOMFIEI	8 LD HILLS, MI 48303		ART UNIT	PAPER NUMBER
	,		2121	
			DATEMAN ED 00/16/000	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	**				
,	09/827,519	NASMAN ET AL.					
Office Action Summary	Examiner	Art Unit					
	Thomas K Pham	2121					
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet wi	th the correspondence addr	ess				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a replif NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statul Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a re oly within the statutory minimum of thirt I will apply and will expire SIX (6) MON te. cause the application to become AB	eply be timely filed  y (30) days will be considered timely.  THS from the mailing date of this com  ANDONED (35 U.S.C. § 133).	munication.				
Status							
1) Responsive to communication(s) filed on <u>06 April 2001</u> .							
2a) This action is <b>FINAL</b> . 2b) ☑ Thi	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.						
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4) Claim(s) <u>1-20</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6) Claim(s) <u>1-20</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/	or election requirement.						
Application Papers							
9) The specification is objected to by the Examin	er.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	· ·						
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documer		pplication No					
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Burea	au (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a lis	t of the certified copies not	received.					
Attachment(s)							
1) Notice of References Cited (PTO-892)		Summary (PTO-413)					
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date</li> </ol>	_	s)/Mail Date nformal Patent Application (PTO- 	152)				

Art Unit: 2121

#### First Action on the Merits

1. Claims 1-20 of U.S. Application 09/827,519 filed on 4/6/2001 are presented for examination.

#### **Quotations of U.S. Code Title 35**

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2121

## Claim Objections

6. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 11-21 been renumbered to 10-20. The new claim numbers are applied to the following rejections.

## Claim Rejections - 35 USC § 112

7. Claims 1, 2, 11 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "standard communication interface" in claims 1, 2, 11 and 18 is a relative term which renders the claim indefinite. The term "standard communication interface" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The word "POD" (for example, lines 3, 5 and 10 of claim 1) was not defined by the claim or described in the specification for what it stands for, hence, "POD" renders the claim indefinite.

For the purpose of examination, the examiner will assume the term "standard communication interface" is any standard communication interface.

Art Unit: 2121

## Claim Rejections - 35 USC § 103

8. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,222,718 ("Dible") in view of U.S. Patent 5,632,207 ("Little").

## Regarding claims 1 and 11

Dible teaches a communications interface system for communicating information in a fabrication processing system, comprising: a power delivery system component including a standard communication interface for communicating information that complies with a first protocol (fig. 3 element 200). Dible does not teach a portable device coupled between the standard communication interface and a second communication interface for communicating information therebetween, the second communication interface communicating information that complies with a second protocol, the portable device being detachable from the standard communication interface and the second communication interface; a first communication link for coupling the standard communication interface to the portable device; and a second communication link for coupling the portable device to the second communication interface. However, Little teaches a portable device (fig. 1, element 10) coupled between the standard communication interface and a second communication interface for communicating information therebetween (col. 8 lines 50-51, "the micro status register ... one wire front end 72"), the second communication interface communicating information that complies with a second protocol (col. 8 line 52, "and then sent out to ... one wire bus"), the portable device being detachable from the standard communication interface and the second communication interface (col. 7 lines 31-39, "FIG. 2 depicts ... over the one wire bus 44"); a first communication link for coupling the standard communication interface to the portable device (fig. 4, data bus connect between microcomputer data/control bus and

Art Unit: 2121

element 84); and a second communication link for coupling the portable device to the second communication interface (fig. 4, data bus connect between element 86 and microcomputer data/control bus) for the purpose of providing an inexpensive and secured bidirectional data communication via a data bus. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the data communication of Little with the system of Dible because it would provide for the purpose of providing an inexpensive and secured bidirectional data communication via a data bus.

## Regarding claim 2

Dible teaches the standard communication interface uses a custom protocol (col. 7 lines 14-19, "The couplings between ... the coax cable/connectors").

## Regarding claim 3

Little teaches the second communication interface uses a standard protocol (col. 8 lines 34-36, "The one wire front end ... one wire communications").

#### Regarding claim 4

Dible teaches the standard protocol is selected from the group of analog interface, USB, Ethernet, Devicenet, Profibus, Modbus, and Infrared Transceiver (col. 6 lines 46-51, "an integrated power module ... plasma processing chamber").

#### Regarding claims 5-6, 12-13 and 19

Dible and Little do not teach the portable device further includes a mass storage device.

However, Little teaches the storage device can be increase the size (col. 3 lines 47-49, "could be designed to ... increased in size") for the purpose of handling larger storage capacity. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to

Art Unit: 2121

increase the storage capacity for the purpose of handling larger storage load.

## Regarding claims 7, 16 and 20

Little teaches the portable device includes a plurality of interface ports for interfacing with more than one communication interface (fig. 4).

### Regarding claims 8, 14 and 15

Little teaches the portable device further includes a coprocessor (col. 3 lines 40-44, "The present electronic module ... a co-processor's capabilities").

#### Regarding claim 9

Little teaches the second communication interface is a customer interface (fig. 2, interface 44 connecting the master 42 and portable device 10, element 40, wherein the master 42 is a separate module which could be a customer device).

## Regarding claims 10 and 17

Dible teaches the power delivery system component is selected from the group of V/I probes, generators, matching networks, and power amplifiers (fig. 2, element 232).

#### Regarding claim 18

Dible teaches a communication s interface system for communicating information in a plasma processing system, comprising: a generator assembly including a standard communication interface (fig. 3 element 200) conforming to a custom protocol for communicating information, the standard communication interface including a communication port for receiving communication signals (col. 7 lines 14-19, "The couplings between ... the coax cable/connectors"). Dible does not teach a first communication link having a first end detachably coupled to the standard communication interface communication port; an interface portable

Art Unit: 2121

device detachably coupled between the standard communication interface and a second communication interface for communicating information therebetween, the second communication interface conforming to a standard protocol, the interface portable device converting information flowing between the standard communication interface and the second communication interface such that information flowing to the second communication interface conforms to the standard protocol and information flowing to the standard communication interface conforms to the custom protocol; and a second communication link for detachably coupling the portable device to the second communication interface. However, Little teaches a first communication link having a first end detachably coupled to the standard communication interface communication port (fig. 4, data bus connect between microcomputer data/control bus and element 84); an interface portable device (fig. 1, element 10) detachably coupled between the standard communication interface and a second communication interface for communicating information therebetween (col. 8 lines 50-51, "the micro status register ... one wire front end 72"), the second communication interface conforming to a standard protocol (col. 8 line 52, "and then sent out to ... one wire bus"), the interface portable device converting information flowing between the standard communication interface and the second communication interface such that information flowing to the second communication interface conforms to the standard protocol and information flowing to the standard communication interface conforms to the custom protocol (col. 8 lines 29-60, "FIG. 4 is a slave ... commands or data are formatted"); and a second communication link for detachably coupling the portable device to the second communication interface (fig. 4, data bus connect between element 86 and microcomputer data/control bus) for the purpose of providing an inexpensive and secured bidirectional data

Art Unit: 2121

communication via a data bus. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the data communication of Little with the system of Dible because it would provide for the purpose of providing an inexpensive and secured bidirectional data communication via a data bus.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thomas Pham*; whose telephone number is (703) 305-7587 or the new number (571) 272-3689 beginning around mid. October 2004, Monday - Friday from 8:00 AM - 5:00 PM EST or contact Supervisor *Mr. Anthony Knight* at (703) 308-3179 (or 571 272-3687 starting around mid. Oct. 2004).

Any response to this office action should be mailed to: Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450. Responses may also be faxed to the official fax number (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas Pham

Patent Examiner

TP

September 13, 2004

Anthony Knight

Supervisory Patent Examiner

Group 3600